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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/025,932	12/26/2001	Maurico Lopez	BS01-320	6440

45695 7590 06/13/2005

WITHERS & KEYS FOR BELL SOUTH
P. O. BOX 71355
MARIETTA, GA 30007-1355

EXAMINER	
RAMPURIA, SATISH	

ART UNIT	PAPER NUMBER
2191	

DATE MAILED: 06/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/025,932	LOPEZ ET AL.	
	Examiner	Art Unit	
	Satish S. Rampuria	2191	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 January 2002*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Response to Amendment

1. This action is in response to the amendment received on 01/10/2005.

2. The objection to use of trademarks (JAVA) is withdrawn in view of applicant's amendment.

3. The objection to claims 7 and 23 due to trademarks (JAVA) used is withdrawn in view of applicant's amendment.

4. The rejections under 35 U.S.C. §112 second paragraph to claims 1, 13, and 14 is withdrawn in view of applicant's amendment.

5. Claims amended by the applicant: 1, 7, 8, 13, 14, 20, and 23.

6. Claims pending in the application: 1-24.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1, 2, 4-6, 8, 9, and 11-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramraj in view of A Probe-Based Monitoring Scheme for an Object-Oriented, Distributed Operating System, published in Sep 1986 to Dasgupta (hereinafter called Dasgupta).

Per claims 1 and 14:

Ramraj disclose:

- A system for analyzing a computer application while it is executing without terminating or interrupting the application (page 1, paragraph 7 "monitoring a transaction executing on a network computer"), comprising:
- an application that is executing to be analyzed (page 1, paragraph 21 "simplify application... across networks, including the Internet");
- an administration client (page 1, paragraph 7 "a network computer");
- an object shell console executing on the administration client (page 1, paragraph 7 "transaction executing on a network computer"), the object shell console connected to the application (page 1, paragraph 7 "transaction executing on a network computer") so that it can extract information from the application (page 1, paragraph 11 "transaction execution data associated with the executing transaction is captured (extracted) by the monitoring function") without interrupting the application or causing the application to terminate (page 1, paragraph 6 "monitoring... accomplished without interfering with the actual transaction"); and
- a graphical user interface presented by the object shell console for presenting at least a portion of the extracted information to the user and allowing the user to obtain additional detailed information (page 1, paragraph 7 "web page includes at least on block of processing code for executing a transaction... updating the web page... function for monitoring the transaction").

Ramraj does not explicitly disclose that defines at least the basic internal structure of the application including at least one object component, and regarding the internal structure including values associated with the at least one object component, as amended.

However, Dasgupta discloses in an analogous computer system that defines at least the basic internal structure of the application including at least one object component (page 62, section 4.3 System Health Monitoring using Probes "The monitor periodically probes (probe is well known debugging technique to the people of ordinary skill in the art)... components in its list... components are stored in a database... database has... structure and properties"), and regarding the internal structure including values associated with the at least one object component (page 62, section 4.3 System Health Monitoring using Probes "The monitor periodically probes (probe is well known debugging technique to the people of ordinary skill in the art)... components in its list... components are stored in a database... database has... structure and properties").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the method of extracting information which has the internal structure which has component objects as taught by Dasgupta into the method of monitoring the execution of a transaction as taught by Ramraj. The modification would be obvious because of one of ordinary skill in the art would be motivated to only extract information which are needed to provide an enhance technique for debugging while the program or process is running as suggested by Dasgupta (page 65, section 6. Debugging Support).

Per claims 2 and 17:

The rejection of claim 1 is incorporated, and further, Ramraj disclose:

- wherein the extracted information includes methods invoked by the application (page 1, paragraph 10 "Invoking the monitoring code file includes capturing data associated with the execution of the transaction").

Per claims 4 and 15:

The rejection of claim 1 is incorporated, and further, Ramraj disclose:

- wherein the object shell console determines a number of times a selected method is invoked (page 1, paragraph 10 "transaction data... include one or more data items selected from a list consisting... start and stop time").

Per claim 5 and 16:

The rejection of claim 1 is incorporated, and further, Ramraj disclose:

- wherein the object shell console determines a length of time required for a selected method to execute (page 1, paragraph 10 "transaction data... include one or more data items selected from a list consisting... start and stop time").

Per claim 6:

The rejection of claim 1 is incorporated, and further, Ramraj discloses:

- a thread that connects the application to the object shell console (page 1, paragraph 9 "the applet includes at least one link to a monitoring code file").

Per claims 8 and 13:

Ramraj disclose:

- A method for analyzing a computer application while it is executing (page 1, paragraph 7 "monitoring a transaction executing on a network computer"), comprising the steps of:
- connecting an object shell console to an executing computer application (page 1, paragraph 7 "transaction executing on a network computer");
- extracting information from the computer application (page 1, paragraph 11 "transaction execution data associated with the executing transaction is captured (extracted) by the monitoring function") without interrupting or terminating the computer application (page 1, paragraph 6 "monitoring... accomplished without interfering with the actual transaction"); and
- displaying the information to a user in a graphical user interface (page 1, paragraph 7 "web page includes at least on block of processing code for executing a transaction... updating the web page... function for monitoring the transaction").

Ramraj does not explicitly disclose defining the internal structure of the application and including at least one object component, and about the at least one object component including a value associated with the object component as amended.

However, Dasgupta discloses in an analogous computer system defining the internal structure of the application and including at least one object component (page 62, section 4.3 System Health Monitoring using Probes "The monitor periodically probes (probe is well known debugging technique to the people of ordinary skill in the art)... components in its list...

components are stored in a database... database has... structure and properties"), and about the at least one object component including a value associated with the object component (page 62, section 4.3 System Health Monitoring using Probes "The monitor periodically probes (probe is well known debugging technique to the people of ordinary skill in the art)... components in its list... components are stored in a database... database has... structure and properties").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the method of extracting information which has the internal structure which has component objects as taught by Dasgupta into the method of monitoring the execution of a transaction as taught by Ramraj. The modification would be obvious because of one of ordinary skill in the art would be motivated to only extract information which are needed to provide an enhance technique for debugging while the program or process is running as suggested by Dasgupta (page 65, section 6. Debugging Support).

Per claim 9:

The rejection of claim 8 is incorporated, and further, Ramraj discloses:

- using a thread to make the connection (page 1, paragraph 9 "the applet includes at least one link to a monitoring code file").

Per claims 11 and 12:

The rejection of claim 8 is incorporated, and further, Ramraj disclose:

- displaying at least one class in the graphical user interface (page 1, paragraph 7 "web page includes at least one block of processing code"); and

- displaying at least one method corresponding to at least one of the at least one classes (page 1, paragraph 9 "applet includes at least one link to a monitoring code file").

Although, Ramraj teach display the information via web page. Ramraj is silent on displaying the information in according to a hierarchy. However, this feature deemed to be inherent to the Ramraj system, Ramraj system shows displaying information via a web page on page 1, paragraph 7 and paragraph 9. Ramraj system would in inoperative if the method is not invoked for the execution via a browser.

Per claims 18 and 19:

The rejection of claim 14 is incorporated, and further, Ramraj disclose:

- providing a list of one or more methods comprising the application in the graphical user interface (page 1, paragraph 7 "web page includes at least on block of processing code for executing a transaction... updating the web page... function for monitoring the transaction").

Although, Ramraj teach display the information via web page. Ramraj is silent on displaying the information in according to a hierarchy. However, this feature deemed to be inherent to the Ramraj system, Ramraj system shows displaying information via a web page on page 1, paragraph 7 and paragraph 9. Ramraj system would in inoperative if the method is not invoked for the execution via a browser.

Per claims 20 and 21:

Ramraj disclose:

- A system for analyzing a computer application in real-time (page 1, paragraph 7 "monitoring a transaction executing on a network computer"), comprising:
- an application server on which one or more computer applications is executing (page 1, paragraph 21 "simplify application... across networks, including the Internet"), one of the one or more computer applications being a computer application to be analyzed (page 1, paragraph 21 "simplify application... across networks, including the Internet");
- an administration client (page 1, paragraph 7 "a network computer");
- an object shell console executing on the administration client (page 1, paragraph 7 "transaction executing on a network computer") that can attach to the application to be analyzed (page 1, paragraph 7 "transaction executing on a network computer") to extracted information from the application to be analyzed (page 1, paragraph 11 "transaction execution data associated with the executing transaction is captured (extracted) by the monitoring function"); and
- a graphical user interface in which the information from the application to be analyzed is displayed to a user (page 1, paragraph 7 "web page includes at least on block of processing code for executing a transaction... updating the web page... function for monitoring the transaction").

Ramraj does not explicitly disclose that defines at least the basic internal structure of the application including at least one object component, and defines the internal structure including object component, as amended.

However, Dasgupta discloses in an analogous computer system that defines at least the basic internal structure of the application including at least one object component (page 62, section 4.3 System Health Monitoring using Probes "The monitor periodically probes (probe is well known debugging technique to the people of ordinary skill in the art)... components in its list... components are stored in a database... database has... structure and properties"), and defines the internal structure including object component (page 62, section 4.3 System Health Monitoring using Probes "The monitor periodically probes (probe is well known debugging technique to the people of ordinary skill in the art)... components in its list... components are stored in a database... database has... structure and properties").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the method of extracting information which has the internal structure which has component objects as taught by Dasgupta into the method of monitoring the execution of a transaction as taught by Ramraj. The modification would be obvious because of one of ordinary skill in the art would be motivated to only extract information which are needed to provide an enhance technique for debugging while the program or process is running as suggested by Dasgupta (page 65, section 6. Debugging Support).

Per claim 22:

The rejection of claim 20 is incorporated, and further, Ramraj discloses:

- a thread through which the object shell is attached to the application to be analyzed (page 1, paragraph 9 "the applet includes at least one link to a monitoring code file").

9. Claims 3, 10, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramraj in view of US Publication No. US 2002/0046273 to Lahr et al. (hereinafter called Lahr).

Per claim 3:

The rejection of claim 1 is incorporated, and further, Ramraj does not explicitly disclose wherein the extracted information includes variables names and variable values used in the application.

However, Lahr discloses in an analogous computer system the extracted information (page 6, paragraph 62 "certain parameters... have to be extracted") includes variables names and variable values used in the application (page 5, paragraph 50 "extracts appropriate parameters from the packet" and page 2, paragraph 25 "retrieving values for variables").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the method of extracting information includes variables and values as taught by Lahr into the method of monitoring the execution of a transaction as taught by Ramraj. The modification would be obvious because of one of ordinary skill in the art would be motivated to extract information to provide data analysis in a multi-tiered network devices as suggested by Lahr (page 2, paragraph 11).

Per claims 10 and 24:

The rejection of claim 8 and 20 respectively, is incorporated, and further, Ramraj disclose:

- number of times a selected method is invoked, an execution time of a selected method and a class (page 1, paragraph 10 "transaction data... include one or more data items selected from a list consisting... start and stop time").

Ramraj does not explicitly disclose extracting one or more of a variable name, a variable value, an argument name, an argument value.

However, Lahr discloses in an analogous computer system the extracting one or more of a variable name (page 6, paragraph 62 "certain parameters... have to be extracted"), a variable value, an argument name, an argument value (page 5, paragraph 50 "extracts appropriate parameters from the packet" and page 2, paragraph 25 "retrieving values for variables").

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the method of extracting information includes variables and values as taught by Lahr into the method of monitoring the execution of a transaction as taught by Ramraj. The modification would be obvious because of one of ordinary skill in the art would be motivated to extract information to provide data analysis in a multi-tiered network devices as suggested by Lahr (page 2, paragraph 11).

10. Claims 7 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramraj in view of US Patent No. 6,687,702 to Vaitheeswaran et al. (hereinafter called Vaitheeswaran).

Per claims 7 and 23:

The rejection of claims 6 and 22 respectively, is incorporated, and further, Ramraj does not explicitly disclose the thread is created using ~~Java~~ JAVA programming language RMI.

However, Vaitheeswaran discloses in an analogous computer system the thread is created using ~~Java~~ JAVA programming language RMI (col. 10, lines 33-34 "The Java client(s) 310 invokes a RMI (remote method invocation) call" and col. 10 lines 46-48 "The entire task of invoking the JDBC call (and therefore the corresponding JDBC driver) occurs within one or more threads that are executing at the EJB server 320" also, fig. 3 and related discussion).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the method of creating thread using JAVA RMI as taught by Vaitheeswaran into the method of monitoring the execution of a transaction as taught by Ramraj. The modification would be obvious because of one of ordinary skill in the art would be motivated to use JAVA RMI to create thread in network communication between multi-tier database system to provide high speed communication as suggested by Vaitheeswaran (col. 5, lines 10-22).

Response to Arguments

11. Applicant's arguments with respect to claims 1, 8, 14, and 20 has been considered but are moot in view of new ground(s) of rejection.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Satish S. Rampuria** whose telephone number is **(571) 272-3732**. The examiner can normally be reached on **8:30 am to 5:00 pm** Monday to Friday except every other Friday and federal holidays. Any inquiry of a general nature or relating to the status of this application should be directed to the **TC 2100 Group receptionist: 571-272-2100**

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Tuan Q. Dam** can be reached on **(571) 272-3695**. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Satish S. Rampuria
Patent Examiner
Art Unit 2191
06/13/2005

WEI Y. ZHEN
PRIMARY EXAMINER